No. 8900253

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

University of Idaho

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS ... BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

BEAN

'UI 686'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of* Washington, D.C. *this* 31st *day of* December *in the year of our Lord one thousand nine hundred and* ninety-two.

Attest:

Kenneth A. Evans

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

~~APPROVAL EXPIRES 2-29-89~~

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

FORM APPROVED: OMB NO. 0581-0055

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION	3. VARIETY NAME
University of Idaho	83:6868	UI 686

4. ADDRESS *(Street and No. or R.F.D. No., City, State, and Zip Code)*	5. PHONE *(Include area code)*	FOR OFFICIAL USE ONLY PVPO NUMBER 8900253
Moscow, ID 83843		

6. GENUS AND SPECIES NAME	7. FAMILY NAME *(Botanical)*	FILING DATE / TIME
Phaseolus Vulgaris (L.)	Leguminosae	~~June~~ 19, 1989 1:30 ☐ A.M. ☑ P.M.

8. KIND NAME	9. DATE OF DETERMINATION	FEES RECEIVED
Dry Bean - Cranberry	~~Feb. 1, 1986~~ April 1, 1987 ← This is late per TAX AAA 140ct1992	AMOUNT FOR FILING $ 2150.— DATE June 19, 1989 AMOUNT FOR CERTIFICATE $ 250.— DATE Dec. 17, 1992

10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION *(Corporation, partnership, association, etc.)*

Land - Grant University

11. IF INCORPORATED, GIVE STATE OF INCORPORATION	12. DATE OF INCORPORATION

13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS

James R. Myers
Rt. #1 3793 N 3600 E
Kimberly, ID 83341

208 423-4691
PHONE *(Include area code)*:

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED

a. ☒ Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
b. ☒ Exhibit B, Novelty Statement.
c. ☒ Exhibit C, Objective Description of Variety *(Request form from Plant Variety Protection Office.)*
d. ☒ Exhibit D, Additional Description of Variety.
e. ☒ Exhibit E, Statement of the Basis of Applicant's Ownership.

15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? *(See Section 83(a) of the Plant Variety Protection Act.)* ☒ Yes *(If "Yes," answer items 16 and 17 below)* ☐ No

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?	17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?
☒ Yes ☐ No	☒ Foundation ☒ Registered ☒ Certified

18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.?

☐ Yes *(If "Yes," give date)*
☒ No

19. HAS THE VARIETY BEEN RELEASED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES ?

☐ Yes *(If "Yes," give names of countries and dates)*
☒ No

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT	DATE
James R. Myers	3/30/89
SIGNATURE OF APPLICANT	DATE
Gary L. Lee Director IAES	6-10-89

FORM LS-470 (3-86) *Edition of 7-84 obsolete.*

INSTRUCTIONS

General: Send an original copy of the application and exhibits, at least 2,500 viable seeds *(furnish only untreated seed)*, and $1,800 fee *($200 filing fee and $1,600 examination fee)* to the U. S. Department of Agriculture, Agricultural Marketing Service, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. *(See Section 180.175 of the Regulations and Rules of Practice.)* Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

Item

9 Give the date the applicant determined that he had a new variety based on (1) the definition in Section 41(a) of the Act and (2) the date a decision was made to increase the seed.

14a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.

14b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.

14c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.

14d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.

14e Section 52(4) of the Plant Variety Protection Act requires applicants to furnish a statement of the basis of the applicant's ownership. The applicant may be the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

15 If "Yes" is specified *(seed of this variety be sold by variety name only as a class of certified seed)* the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "No," he may change his choice. *(See Section 180.16 of the Regulations and Rules of Practice.)*

19 See Sections 41 (i,j) and 42 of the Plant Variety Protection Act and Section 180.7 of the Regulations and Rules of Practice for eligibility requirements.

NOTE: All information submitted in support of an application becomes PUBLIC INFORMATION once the certificate is issued. (*See Section 180.17 of the Regulations and Rules of Practice.*)

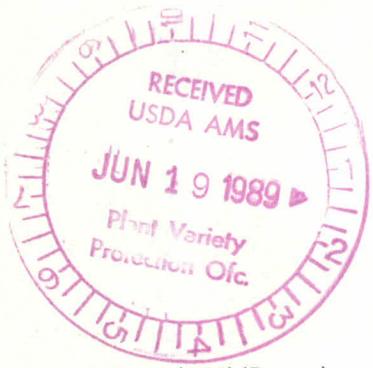

Exhibit A Origin and Breeding History of 'UI 686'

'UI 686' is an F_8 selection made by John Kolar in 1983 from a 1977 cross between 'UI 50' and 'Hi Lo Bean'. It is now in the F_{12} generation. The pedigree breeding method was used to develop this cultivar (Figure 1). The parent 'UI 50' is a cranberry released in 1974 by Marshall LeBaron. It is an upright bush with medium season maturity and medium yield. It has resistance to the common and NY strains of bean common mosaic virus (BCMV), but is susceptible to curly top virus. It has large, elongate seed. 'Hi Lo Bean' was an heirloom bean whose origin is unknown. It has large, oval seed which is white with a large, brown and black-speckled eye.

'UI 686' was in Kimberly preliminary trials in 1985, and in advanced trials at Kimberly and Parma in 1986-1988. It was also tested in yield trials in Michigan in 1986 and 1987 (Exhibit D, Table 1).

Tests for resistance to BCMV were performed at Prosser, WA under the direction of Matt Silbernagel in 1988. 'UI 686' was resistant to the NY-15 and NL-4 races of BCMV, but susceptible to the NL-3 race of BCMV. These results are consistent with 'UI 686' possessing the dominant *I* gene for resistance to BCMV.

Figure 1. Pedigree for the cranberry UI 686.[1]

Cross: UI 50 X Hi Lo Bean

Generation	Year	Comments
F_1	1977	
↓		
F_2	1978	Single plant selection
↓		
F_3	1979	Single plant selection
↓		
F_4	1980	Single plant selection
↓		
F_5	1980	Grnhouse, Sing. plt. sel.
↓		
F_6	1981	Bulked
↓		
F_7	1982	Bulked
↓		
F_8	1983	Bulked
↓		
-	1984	-
↓		
F_9	1985	Preliminary Nursery
↓		
F_{10}	1986	Advanced Nursery
↓		
F_{11}	1987	Advanced Nursery
↓		
F_{12}	1988	Advanced Nursery

[1]Crosses made in the greenhouse and all other generations grown in the field unless otherwise noted.

Seed increase made in 1987 from bulked seed maintained in the 1986 early generation nursery.

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PVP Application No. 8900253 Cranberry Bean 'UI 686'

Addendum to Exhibit A

1) Type and frequency of variants:

No variants or off-types have been observed during the propagation of UI 686.

2) Evidence of uniformity and stability:

This cultivar was in the F_{16} generation in 1992. From the F_6 generation onwards, UI 686 has been uniform, and has performed in a stable manner. UI 686 has been under my personal observation during the last 5 generations with no significant variation. Since 1989, the cultivar has been included in our foundation seed program, where it undergoes several field and laboratory inspections for certified seed production by Idaho Crop Improvement Association each year. UI 686 has been found to be stable and uniform in these inspections.

Exhibit B **Statement of Novelty**

'UI 686' can be distinguished from other cranberry cultivars by seed characteristics, growth habit, and yield (Exhibit D, Table 1). The seed size is the largest of any cranberry with the exception of 'Sacramento Valley Milling Cranberry' when compared in Idaho environments. The seed is also a distinctive oval shape whereas other cranberries have more elongate seed. 'UI 686' has an upright, indeterminant vine growth habit whereas nearly all other cranberries have determinant bush growth habits. 'Michigan Improved Cranberry' has an indeterminant growth habit, but is more susceptible to lodging than UI 686. 'Michigan Improved Cranberry' also has smaller leaves than those of UI 686. In Idaho, 'UI 686' has consistently yielded more than the bush cranberry cultivars, but less than 'Michigan Improved Cranberry'.

Exhibit C

U. S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK AND SEED DIVISION

OBJECTIVE DESCRIPTION OF VARIETY
Dry Edible Bean (Phaseolus vulgaris L.)

NAME OF APPLICANT(S)	EXPERIMENTAL NAME	VARIETY NAME
University of Idaho	83:6868	UI 686

ADDRESS (Street and No. or R.F.D. No., City, State, ZIP)

Moscow, ID 83843

FOR OFFICIAL USE ONLY

PVPO NO. 8900253

Provide data for all characters unless indicated as "optional." Place numbers in the boxes for the characters or numerical values which best describe this variety. Measured data should be the mean of an appropriate number of well spaced (15-20 cm) plants. The Royal Horticulture Society or any recognized color standard may be used to determine plant color. Designate the color system used below.

COLOR SYSTEM USED: R. H. S. colour chart

LOCATION OF THE TEST(S) TO EVALUATE THIS VARIETY: Kimberly, Parma Idaho

MARKET CLASS

Entered: 0 8

CLASS	CHECK
1 = Navy (Pea)	Seafarer
2 = Small White	Aurora
3 = Black	Midnight
4 = Pinto	UI-114
5 = Great Northern	UI-59
6 = Small Red	NW-59
7 = Pink	Viva
8 = Cranberry	UI-50
9 = Dark Red Kidney	Montcalm
10 = Light Red Kidney	Redkloud
11 = Yellow Eye	Steuben
12 = Other (specify)	

2. MATURITY

Entered: 2 — 1 = Early (80-90 days); 2 = Medium (90-100 days); 3 = Late (>100 days)

Entered: 0 9 8 — Days from planting to harvest maturity

Heat units from planting to harvest maturity (optional). Specify base temperature used: _____

Entered: 0 9 8 — Days from planting to harvest maturity of check variety (use check appropriate to market class shown in item 1)

PLANT HABIT

Entered: 4

TYPE
1 = Ia Bush-determinate, strong and erect stem and branches
2 = Ib Bush-determinate, weak stem and branches
3 = IIa Erect growth habit-indeterminate, guides (runners) short or not developed
4 = IIb Erect growth habit-indeterminate, guides medium to long, with no ability to climb
5 = IIIa Vine-indeterminate, short guides with no ability to climb
6 = IIIb Vine-indeterminate, long guides with ability to climb
7 = IVa Indeterminate climbing, pods distributed throughout the plant
8 = IVb Indeterminate climbing, pods concentrated on the upper part of the plant

Entered: 0 7 3 — Average height of mature plant, in cm.

Entered: 0 4 9 — Average height of check variety, in cm. (use same check as above)

Entered: 3 — Pod Position: 1 = Low (lower pods touching soil surface) 2 = High (lower pods not touching soil surface) 3 = Scattered (not concentrated high or low)

Entered: 2 — Adaptability to machine harvest: 1 = Adapted 2 = Not Adapted

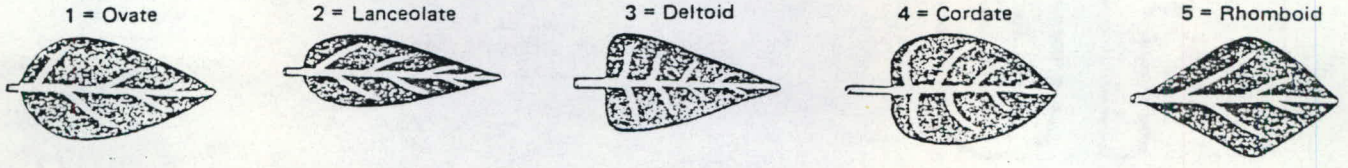
Entered: 2 — Lodging resistance: 1 = Good 2 = Fair 3 = Poor

LEAFLET MORPHOLOGY (Use terminal leaflet of a fully expanded trifoliolate)

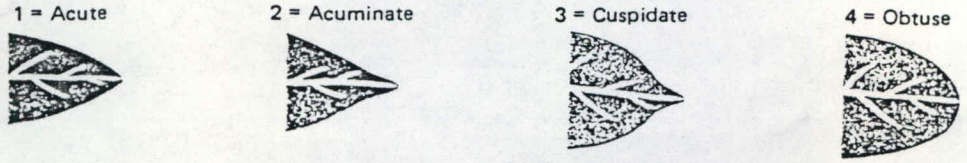
Entered: 2 — 1 = Smooth; 2 = Wrinkled

Entered: 1 — 1 = Dull; 2 = Glossy; 3 = Semiglossy; 4 = Variable

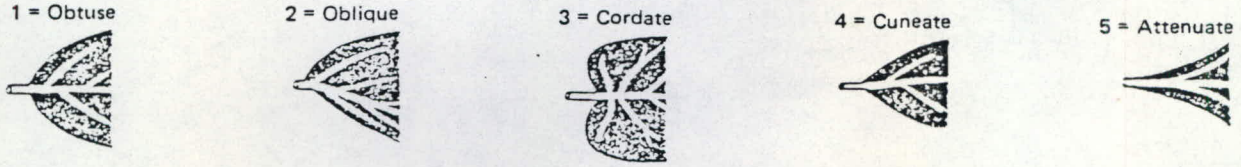
Entered: 1 — SHAPE:



Entered: 2 — APEX OF LEAFLET:



Entered: 4 — BASE OF LEAFLET:



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5. FLOWER COLOR AND DAYS TO BLOOM

[3] COLOR OF STANDARD: 1 = White; 2 = Cream; 3 = Pink; 4 = Blue; 5 = Purple

[1] COLOR OF KEEL: 1 = White; 2 = Cream; 3 = Pink; 4 = Blue; 5 = Purple

[3] COLOR OF WINGS: 1 = White; 2 = Cream; 3 = Pink; 4 = Blue; 5 = Purple

[5][4] Days to 50% bloom

6. POD MORPHOLOGY (Green pod morphology optional)

Green Mature

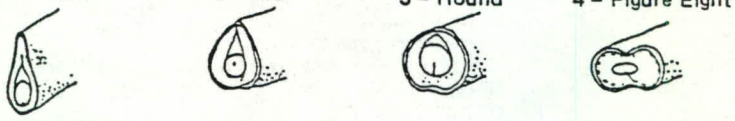
[ ] [2] COLOR PATTERN: 1 = Solid; 2 = Striped; 3 = Blotched; 4 = Mottled; 5 = Other _____

[ ] [5] PRIMARY COLOR: 1 = Purple; 2 = Red; 3 = Green; 4 = Yellow; 5 = Tan; 6 = Brown; 7 = Other _____

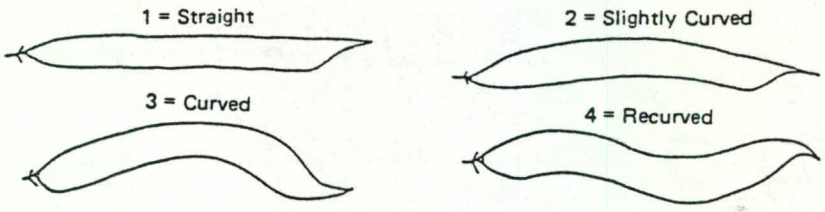
[ ] [1] COLOR MODIFIER: 1 = Light; 2 = Light Medium; 3 = Medium; 4 = Medium Dark; 5 = Dark

[ ] [1] SECONDARY COLOR: 1 = Purple; 2 = Red; 3 = Green; 4 = Yellow; 5 = Tan; 6 = Brown; 7 = Other _____

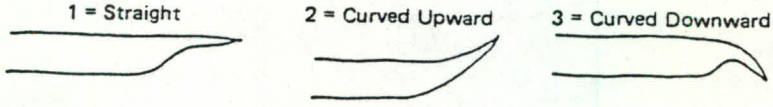
[ ] [1] CROSS SECTION SHAPE: 1 = Flat; 2 = Pear; 3 = Round; 4 = Figure Eight



[ ] [2] POD CURVATURE: 1 = Straight; 2 = Slightly Curved; 3 = Curved; 4 = Recurved



[ ] [3] POD BEAK ORIENTATION: 1 = Straight; 2 = Curved Upward; 3 = Curved Downward; 4 = Variable



Average beak length, in cm. _____

[ ] [2] CONSTRICTIONS: 1 = None; 2 = Slight; 3 = Deep

[ ] . [ ] Average number of seeds per pod

7. SEED COLOR

[1] 1 = Shiny; 2 = Dull; 3 = Semishiny; 4 = Variable

[2] 1 = Monochrome; 2 = Polychrome

[0][3] PRIMARY COLOR: 1 = White; 2 = Yellow; 3 = Buff; 4 = Tan; 5 = Brown; 6 = Pink; 7 = Red; 8 = Purple; 9 = Blue; 10 = Black; 11 = Other _____

[0][8] SECONDARY COLOR: 1 = White; 2 = Yellow; 3 = Buff; 4 = Tan; 5 = Brown; 6 = Pink; 7 = Red; 8 = Purple; 9 = Blue; 10 = Black; 11 = Other _____

[4] COLOR PATTERN: 1 = Solid; 2 = Splashed; 3 = Mottled; 4 = Striped; 5 = Flecked; 6 = Dotted

[2] HILAR RING: 1 = Absent; 2 = Present

[0][2] HILAR RING COLOR: 1 = White; 2 = Yellow; 3 = Buff; 4 = Tan; 5 = Brown; 6 = Pink; 7 = Red; 8 = Purple; 9 = Blue; 10 = Black; 11 = Other _____

8. SEED SHAPE AND WEIGHT

[2] SHAPE OF SEED TAKEN FROM MIDDLE OF POD: 1 = Round; 2 = Oval; 3 = Cuboid; 4 = Kidney; 5 = Truncate Fastigiate

[4][6] Dry seed weight in g/100g seeds (adjusted to 12% moisture)

9. ANTHOCYANIN PIGMENTATION

1 = ABSENT
2 = PRESENT

[2] Flowers	[1] Stems	[2] Pods	[2] Seeds
[1] Leaves	[1] Petioles	[1] Peduncles	[1] Nodes

10. KNOWN DISEASE REACTION

DISEASES - COMMON NAME: Anthracnose, Rust, Powdery mildew, Fusarium root rot, Pythium root rot, Rhizoctonia root rot, Pythium wilt, Sclerotinia white mold, Angular leaf spot, Bacterial wilt, Halo blight, Fuscous blight, Common bacterial blight, Red node virus, Pod mottle virus, Bean common mosaic virus, Bean yellow mosaic virus, Curly top virus, Bacterial brown spot, Bean southern mosaic virus, Other (specify) _____

REACTION: 1 = Susceptible; 2 = Resistant; 3 = Tolerant; 4 = Avoidance

(Give the common name (CN), scientific name (SN), and race(s), where applicable)

[2] DISEASE: CN Bean Common Mosaic V. ; SN - ; Race(s) NY-15, NL-4

[1] DISEASE: CN Bean Common Mosaic V. ; SN - ; Race(s) NL-3

[1] DISEASE: CN Curly Top Virus ; SN - ; Race(s) -

[4] DISEASE: CN White Mold ; SN Sclerotinia sclerotiorum ; Race(s) -

[ ] DISEASE: CN _____ ; SN _____ ; Race(s) _____

[ ] DISEASE: CN _____ ; SN _____ ; Race(s) _____

11. KNOWN INSECT/NAMATODE RESISTANCE

PESTS - COMMON NAME: Aphids, Bean pod weevil, Bruchid beetle, Corn earworm, Flea beetle, Leaf hopper, Lesion nematode, Lygus, Mexican bean beetle, Root knot nematode, Corn seed maggot, Spider mites, Thrips, Weevils, Western bean cutworm, Other (specify) _____

REACTION: 1 = Susceptible; 2 = Resistant; 3 = Tolerant; 4 = Avoidance

(Give the common name (CN), scientific name (SN), and biotype, where applicable)

[ ] PEST: CN _____ ; SN _____ ; Biotype _____

[ ] PEST: CN _____ ; SN _____ ; Biotype _____

[ ] PEST: CN _____ ; SN _____ ; Biotype _____

12. KNOWN PHYSIOLOGICAL STRESS REACTION

1 = Susceptible; 2 = Resistant;
3 = Tolerant; 4 = Avoidance

[ ] Heat [ ] Cold [ ] Drought [ ] Air Pollution

Nutrient toxicity or deficiency (specify nutrient) _____

Other _____

13. COMMENTS

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EXHIBIT D Additional Description of 'UI 686'

Table 1. Days to flowering and maturity, seed size, yield, growth habit, and lodging of the cranberry 'UI 686'.

Location[1]	Nursery[2]	Year	Entry	Days to[3] Bloom	Days to Physiol.[4] Maturity	Harvest Maturity	100 seed wt.(g)	Yield (Kg/Ha)	Growth Habit	Lodging
Parma	MISC	1988	UI 686	51 a	88 ab	97	41.8 ab	1992 ab	IIB	4.4 a
			UI 50	44 c	87 bc	97	40.5 b	1776 ab	I	2.8 b
			Cardinal	44 c	85 c	96	42.5 ab	1606 b	I	3.1 b
			SVM Cran	44 c	83 d	95	46.8 a	1077 c	I	1.5 c
			Mich Imp C	48 b	90 a	99	39.5 b	2214 a	IIB	4.5 a
Kimberly	MISC	1988	UI 686	56 -	90 -	98	49.5 a	1681 a	IIB	3.3 -
			UI 50	45 -	89 -	97	43.6 a	1576 a	I	2.0 -
			Cardinal	46 -	89 -	97	43.8 a	1683 a	I	3.0 -
			SVM Cran	62 -	88 -	96	46.0 a	1056 b	I	1.5 -
			Mich Imp C	54 -	93 -	101	43.2 a	1895 a	IIIB	3.8 -
Parma	CDBN	1987	UI 686	-	100 ab	108	56.4 a	2580 a	IIB	-
			Cardinal	-	95 b	103	49.6 a	1999 a	I	-
			Mich Imp C	-	103 a	111	49.1 a	2906 a	IIIB	-
Kimberly	CDBN	1987	UI 686	53 a	101 a	109	64.9 a	2358 a	IIB	3.0 b
			Cardinal	42 b	95 a	103	55.7 a	1960 a	I	2.0 c
			Mich Imp C	52 a	98 a	106	56.3 a	2404 a	IIIB	3.5 a
Kimberly	MISC	1986	UI 686	-	86 -	94	45.9 -	2877 -	IIB	-
			UI 50	-	87 -	95	46.3 -	2349 -	I	-
			Cardinal	-	85 -	93	47.8 -	2685 -	I	-
			SVM Cran	-	82 -	90	53.4 -	1481 -	I	-
			Mich Imp C	-	86 -	94	43.7 -	2787 -	IIB	-
Kimberly	MISC	1985	UI 686	-	95 -	103	52.0 -	3380 -	IIB	-
			UI 50	-	95 -	103	49.9 -	2789 -	I	-
			Mich Imp C	-	96 -	104	45.2 -	2968 -	IIIB	-
Montcalm Co., MI		1987	UI 686	-	100 -	-	-	2529 b	-	-
			Mich Imp C	-	128 -	-	-	(frost)	-	-
			Taylor Cra	-	92 -	-	-	2202 a	-	-
Montcalm Co., MI		1986	UI 686	-	96 -	-	-	1192 c	-	-
			UI 50	-	94 -	-	-	2597 b	-	-
			Cardinal	-	93 -	-	-	3097 a	-	-
			SVM Cran	-	87 -	-	-	3448 a	-	-
			Taylor Cra	-	87 -	-	-	3444 a	-	-

Location[1] Nursery[2] Year	Entry	Days to Bloom[3]	Days to Physiol. Maturity[4]	Harvest Maturity	100 seed wt.(g)	Yield (Kg/Ha)	Growth Habit	Lodging
Overall Average	UI 686	53	93	102	51.7	2478	IIB	3.6
(excluding NY & MI)	Mich Imp C	51	94	103	46.2	2529	IIB-IIIB	3.9
Average, 1986-88	UI 686	53	93	101	51.7	2298	IIB	3.6
(excluding NY & MI)	Cardinal	44	90	98	47.9	1987	I	2.7
	Mich Imp C	51	94	102	46.3	2441	IIB-IIIB	3.9
Average (excluding	UI 686	54	90	98	47.3	2483	IIB	3.9
1987, NY, & MI)	UI 50	45	90	98	45.1	2123	I	2.4
	Mich Imp C	51	91	100	42.9	2466	IIB-IIIB	4.2

[1] Data from Michigan provided by Greg Varner, Michigan Dry Edible Bean Production Research Advisory Board.

[2] With the exception of the 1985 and 1988 Kimberly Miscellaneous nurseries, plots consisted of four rows replicated three or four times. The 1985 and 1988 Kimberly Miscellaneous nurseries were two row plots replicated two and three times, respectively.

[3] Numbers followed by different letters are statistically significant at P=0.05 level using LSD or DNMR tests. Comparisons are only valid within nursery/location/years.

[4] Readings taken at physiological maturity maturity (80-90% buckskin pods) and converted to harvest maturity by adding eight days (the average dry-down period at the Kimberly and Parma locations).

Abbreviations: CDBN, Cooperative Dry Bean Nursery; MISC, Miscellaneous Nursery; SVM Cran, Sacramento Valley Milling Cranberry; Mich Imp, Michigan Improved Cranberry; Taylor Cr, Taylor Cranberry (also Taylor Hort.).

Exhibit D. Additional Description of Variety

Plate 1. Photograph of seed of UI 686 (left) and UI 50 (right) showing differences in size and shape. Color reproduction may not be accurate so may only be used to judge relative differences.

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Exhibit E **Statement of Ownership**

The cultivar UI 686 was developed through the process of sexual hybridization and subsequent selection as part of an ongoing breeding program at the University of Idaho. Sole and exclusive rights to 'UI 686' are the rights of the University of Idaho. This cultivar will be handled by the Director of the Idaho Agricultural Experiment Station as a public variety. Seed of this variety may not be sold as an uncertified class as stated in Title V of the Federal Seed Act. No exclusive and binding contracts may be entered into with any commerical organization.